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MAIL STOP - PCT
Docket No.: 27545U

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: MENGE, et al.

Art Unit: xx

Appl. No.: 10/587,830

Examiner: xx

Appl. Filing Date: 7/28/2006

Intl. Appl. No.: PCT/EP05/50412

Intl. Filing Date: 2/1/2005

For: PYRIDAZINONE DERIVATIVES AND THEIR USE AS PDE4 INHIBITORS

TRANSMITTAL LETTER

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

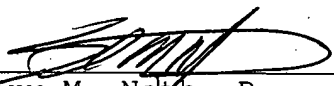
Submitted herewith for filing in the U.S. Patent and Trademark Office is the following:

- 1) Information Disclosure Statement;
- 2) PTO Form-1449 with 48 cited references, and copies of 31 of the 48 cited references.

The Commissioner is hereby authorized to charge any deficiency or credit any excess to Deposit Account No. 14-0112.

Respectfully submitted,
NATH & ASSOCIATES PLLC

October 12, 2006


Gary M. Nath, Reg. No. 26,965
Sheldon M. McGee, Reg. No. 50,454
Customer No. 34375

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For: **PYRIDAZINONE DERIVATIVES AND THEIR USE AS PDE4 INHIBITORS**

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

An Information Disclosure Statement is submitted herewith pursuant to 37 C.F.R. 1.97-1.98. Please note the following particulars: [NOTE: One only of items a, b, c, and d must be checked.]

a. ☒ [XXX] The enclosed statement is being filed within three months of the filing date of a national application, or within three months of the date of entry into the national stage as set forth in 37 C.F.R. 1.491 in an international application, or before the mailing date of a first Office Action on the merits, whichever event occurs last.

b. ☐ [] The enclosed statement is being filed after a first action on the merits but before the mailing date of a final action under 37 C.F.R. 1.113, or a notice of allowance under 37 C.F.R. 1.311.

The enclosed statement is accompanied by [check one]:

☐ [] i. a certification in part (e) below as specified in 37 C.F.R. 1.97(e), or

☐ [] ii. a check in the amount required by 37 C.F.R. 1.17(p).

c. ☐ [] The enclosed statement is being filed after the mailing date of a final action under 37 C.F.R. 1.113, or a notice of allowance under 37 C.F.R. 1.311, but before payment of the issue fee.

- ☐ Certification report(e) below; and
- ☐ a check in the amount as required by 1.17(p).

d. ☐ The enclosed statement is being filed pursuant to 37 C.F.R. 1.97(i), for placement in the file.

e. Certification [Check one] [Certification is required only if box (b)(i) or box (c) is checked.]

☐ I hereby certify that each item of information contained in the enclosed Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement,

or

☐ I hereby certify that no item of information in the enclosed Information Disclosure Statement herewith was cited in a communication from a foreign patent office in a counterpart foreign application, or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

or

☐ Appropriate certification is attached.

f. [XXX] If no check is enclosed and a fee is due in connection with this communication or if the check enclosed is insufficient, the Commissioner is authorized to charge any fee or additional fee due in connection with this communication to Deposit Account No. 14-0112.

g. ☐ Copies of the documents are attached herewith with a completed PTO Form-1449.

or

☐ Copies of the documents are not attached, with a completed PTO Form-1449 as allowed under CFR

1.98(d)(1)(2). The earlier application is identified as:

and / or

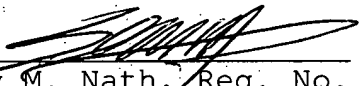
[XXX] Copies of US Patents/Publications not attached, with a completed PTO Form-1449 as allowed in Official Gazette Aug. 5, 2003/ Vol. 1273, no. 1.

The Examiner is respectfully requested to cite the documents listed on the attached Form PTO-1449 in the next Office Action. In so doing, the Examiner is respectfully requested to initial in the space adjacent to the listing of each document on the Form PTO-1449, and return a copy of the initialed Form PTO-1449 with the next communication to Applicants, to confirm that these documents have been considered by the Examiner and made of record in this application.

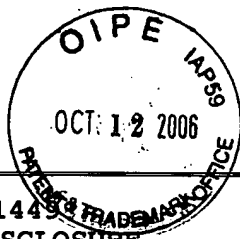
If the Examiner has any questions or wishes to discuss this application, kindly telephone the undersigned at the below-listed number.

Respectfully submitted,
NATH & ASSOCIATES PLLC

October 12, 2006


Gary M. Nath, Reg. No. 26,965
Sheldon M. McGee, Reg. No. 50,454
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U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Issue / Publication Date	Inventor	Filed
A1	5,267,027 (corresponds to EP0539806)	11/30/1993	Ugaki et al.	4/28/1992
A2	5,434,149 (corresponds to EP0618201)	7/18/1995	Jonas et al.	3/31/1994
A3	5,747,489 (corresponds to EP0723962)	5/5/1998	Jonas et al.	1/26/1996
A4	6,399,611 (corresponds to EP0738715)	6/4/2002	Jonas et al.	4/19/1996
A5	5,859,008 (corresponds to EP0763534)	1/12/1999	Jonas et al.	9/13/1996
A6	6,103,718 (corresponds to WO98/31674)	8/15/2000	Sterk	1/12/1998
A7	6,380,196 (corresponds to WO99/31071)	4/30/2002	Ulrich et al.	12/10/1998
A8	6,255,303 (corresponds to WO99/47505)	5/1/2001	Miller et al.	7/6/1999
A9	6,756,371 (corresponds to WO01/30766)	6/29/2004	Sterk	10/24/2000
A10	6,933,296 (corresponds to WO01/94319)	8/23/2005	Sterk	6/1/2001
A11	6,953,853 (corresponds to WO02/064584)	10/11/2005	Grundler et al.	2/14/2002
A12	7,022,696 (corresponds to WO02/085885)	4/4/2006	Grundler et al.	4/24/2002
A13	2004/0127707 (corresponds to WO02/85906)	7/1/2004	Sterk	4/23/2002
A14	2006/0167001 (corresponds to WO2004/018451)	7/27/2006	Sterk	8/6/2003
A15	2006/0094710 (corresponds to WO2004/017957)	5/4/2006	Sterk	8/6/2003
A16	2006/0160813 (corresponds to WO2004/018475)	7/20/2006	Sterk	8/6/2003
A17	6,544,993 (corresponds to WO01/30777)	4/8/2003	Sterk	10/24/2000

Examiner

Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP ' 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Publication Date	Country	Translation
A18	196 04 388 A1	8/14/1997	DE	Abstract
A19	0 539 806 A1 (corresponds to US 5267027)	5/5/1993	EP	No
A20	0 618 201 A1 (corresponds to US 5434149)	10/5/1994	EP	No
A21	0 723 962 A1 (corresponds to US 5747489)	7/31/1996	EP	No
A22	0 738 715 A2 (corresponds to US 6399611)	10/23/1996	EP	No
A23	0 763 534 A1 (corresponds to US 5859008)	3/19/1997	EP	No
A24	93/07146 A1	4/15/1993	WO	N/A
A25	98/31674 A1	7/23/1998	WO	N/A
A26	99/31071 A1	6/24/1999	WO	N/A
A27	99/31090 A1	6/24/1999	WO	N/A
A28	99/47505 A1	9/23/1999	WO	N/A
A29	01/19818 A1	3/22/2001	WO	N/A
A30	01/30766 A1	5/3/2001	WO	N/A
A31	01/30777 A1	5/3/2001	WO	N/A
A32	01/94319 A1	12/13/2001	WO	N/A
A33	02/064584 A1	8/22/2002	WO	N/A
A34	02/085885 A1	10/31/2002	WO	N/A
A35	02/085906 A2	10/31/2002	WO	N/A
A36	03/032993 A1	4/24/2003	WO	N/A
A37	2004/018451 A1	3/4/2004	WO	N/A
A38	2004/017957 A1	3/4/2004	WO	N/A
A39	2004/018475 A2	3/4/2004	WO	N/A
A40	2004/018449 A1	3/4/2004	WO	N/A
A41	2005/075457 A1	8/18/2005	WO	N/A
A42	2005/075456 A1	8/18/2005	WO	N/A

OTHER

Examiner Initial	(Including Author, Title, Date, Pertinent Pages, etc.)
A43	Coates, W.J., et al., "1,4-Bis(3-oxo-2,3-dihydropyridazin-6-yl)benzene Analogues: Potent Phosphodiesterase Inhibitors and Inodilators", <u>J. Med. Chem.</u> , Vol. 33, Pages 1735-1741, (1990).

Examiner	Date Considered
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	A44	Van der Mey, M., et al., "Relationships of 4-Aryl-Substituted <i>cis</i> -Tetra- and <i>cis</i> -Hexahydrophthalazinones", <u>J. Med. Chem.</u> , Vol. 44, No. 16, Pages 2523-2535, (2001).
	A45	Van der Mey, M., et al., "Novel Selective PDE4 Inhibitors. 1. Synthesis, Structure-Activity Relationships, and Molecular Modeling of 4-(3,4-Dimethoxyphenyl)-2 <i>H</i> -phthalazin-1-ones and Analogues", <u>J. Med. Chem.</u> , Vol. 44, No. 16, Pages 2511-2522, (2001).
	A46	Van der Mey, M., et al., "Novel Selective PDE4 Inhibitors. 3. <i>In Vivo</i> Antiinflammatory Activity of a New Series of N-Substituted <i>cis</i> -Tetra- and <i>cis</i> -Hexahydrophthalazinones", <u>J. Med. Chem.</u> , Vol. 45, No. 12, Pages 2520-2525, (2002).
	A47	Van der Mey, M., et al., "Novel Selective Phosphodiesterase (PDE4) Inhibitors. 4. Resolution, Absolute Configuration, and PDE4 Inhibitory Activity of <i>cis</i> -Tetra- and <i>cis</i> -Hexahydrophthalazinones", <u>J. Med. Chem.</u> , Vol. 45, No. 12, Pages 2526-2533, (2002).
	A48	Norman, P., "PDE4 inhibitors 2001. Patent and literature activity 2000 - September 2001", <u>Expert Opin. Ther. Patents</u> , Vol. 12, No. 1, Pages 93-111, (2002).
	A49	
	A50	
	A51	
	A52	
	A53	
	A54	
	A55	
	A56	
	A57	

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